

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims

Claims 1-113 (Cancelled).

114. (Currently Amended) A computer program product comprising a computer useable medium storing computer program logic, the computer program logic comprising:
~~Software stored on a computer readable storage medium at a user station, comprising:~~

first computer program code, ~~an online service selector function,~~ stored and executable at the a user station, that enables a user for enabling a processor at the user station to select among a plurality of available online services to support an application function;

second computer program code ~~a common communications function,~~ stored and executable at the user station, ~~that directs~~ for enabling the processor to direct the establishment and use of a communication link between the user station and each online service, when the online service is selected;

third computer program code ~~a plurality of graphical user interfaces functions~~ stored and executable at the user station, and associated with said application function, ~~and used for~~ enabling the processor to present the user with different customized graphical user interfaces ~~functions~~ for different selected online services in support of said application function; wherein,

the different customized graphical user interfaces ~~functions~~ include ~~elements of a graphical user interface, wherein~~ at least one of the elements that is effected by the use of program logic and that is custom to the respective online service; and

portions of the ~~software used to present the customized graphical user interface functions~~ third computer program code are downloaded from the selected online service in advance of their execution.

115. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, further comprising a set of translators and protocol drivers ~~that facilitate establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service.

116. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, further comprising a protocol translation program code function ~~that facilitates establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service,

117. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, further comprising ~~an~~ application programming interface program code ~~that enables the processor to~~ interconnects the online service selector function and the communications function.

118. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, further comprising a data transport program code function ~~that enables the processor to~~ effectuates data transfers between the user station and the selected online service via the established communication link.

119. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 118, wherein the data transport code function ~~uses an object manifest to effectuate data transfers.~~

120. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 119, further comprising ~~an~~ application programming interface program code for enabling the processor to modify through which the object manifest can be modified.

121. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 120, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a higher-level software entity that can be invoked to modify the object manifest.

122. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 120, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a high-level user interface that enables the user at the user station to modify the object manifest.

123. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 118, further comprising a plurality of user interface functions that enable the user to submit functional requests to the selected online service.

124. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, wherein the ~~online service selector function~~ first program code enables the processor to presents ~~the~~ a user with a list of the available online services.

125. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, wherein the user station is configured for communications with a multiplicity of independently-operated data sources via a non-proprietary network, and further comprises a data transport program code function that enables the processor to effectuates data transfers between the user station and a selected one of the independently-operated data sources via the non-proprietary network.

126. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 125, wherein the non-proprietary network comprises the Internet.

127. (Cancelled)

128. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, further comprising ~~a plurality of~~ database functions program code stored at the user station, ~~wherein the~~ for enabling the processor to present a user is ~~presented~~ with a different ~~customized~~ database function for each different online service by a corresponding ~~one of said~~ database functions.

129. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 128, wherein portions of the ~~software used to present the customized database function~~ database function program code are downloaded from the corresponding online service in advance of their execution.

130. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, further comprising general purpose user interface computer program code wherein the presentation of each of said customized graphical user interface functions is facilitated by use of a common general purpose user interface software package stored and executable at the user station for enabling the processor to facilitate the presentation of each of said customized graphical user interfaces.

131. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, wherein each of the customized graphical user interfaces ~~functions~~ operates as a customized element of a common user interface software package stored and executable at the user station.

132. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 114, wherein the first computer program code is updateable from a remote source to enable the processor to expand the number of available online services ~~can be expanded through use of the software to update itself from a remote source.~~

133. (Currently Amended) A user station, comprising a processor and a computer useable medium storing computer program logic, the computer program logic comprising: ~~and software stored on a computer-readable storage medium, the software including:~~

first computer program code ~~an online service selector function~~, stored and executable at the user station, ~~that enables a user~~ for enabling a processor at the user station to select among a plurality of available online services to support an application function;

second computer program code ~~a common communications function~~, stored and executable at the user station, ~~that directs~~ for enabling the processor to direct the establishment and use of a communication link between the user station and each online service, when the online service is selected; and

third computer program code, a plurality of graphical user interfaces functions stored and executable at the user station, and associated with said application function, ~~and used for enabling the processor~~ to present the user with different customized graphical user interfaces functions for different selected online services in support of said application function; wherein,

the different customized graphical user interfaces ~~functions~~ include ~~elements of a graphical user interface, wherein~~ at least one of the elements that is effected by the use of program logic that is custom to the respective online service; and

portions of the ~~software used to present the customized graphical user interface functions~~ third computer program code are downloaded from the selected online service in advance of their execution.

134. (Currently Amended) The user station as set forth in Claim 133, ~~wherein the software further comprises~~ further comprising a set of translators and protocol drivers ~~that facilitate establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service.

135. (Currently Amended) The user station as set forth in Claim 133, ~~wherein the software further comprises~~ further comprising a protocol translation ~~function that facilitates establishment of~~ the communication link between the user station and the selected online service.

136. (Currently Amended) The user station as set forth in Claim 133, ~~wherein the software further comprises~~ further comprising an application programming interface program code that enables the processor to interconnects the online service selector ~~function~~ and the communications link function.

137. (Currently Amended) The user station as set forth in Claim 133, ~~wherein the software further comprises~~ further comprising a data transport program code ~~function that for enabling the processor to~~ effectuates data transfers between the user station and the selected online service via the established communication link.

138. (Currently Amended) The user station as set forth in Claim 137, wherein the data transport program code ~~function~~ uses an object manifest to effectuate data transfers.

139. (Currently Amended) The user station as set forth in Claim 138, ~~wherein the software further comprises~~ further comprising an application programming interface program code for enabling the processor to modify ~~through which the object manifest can be modified~~.

140. (Currently Amended) The user station as set forth in Claim 139, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a higher-level software entity that can be invoked to modify the object manifest.

141. (Currently Amended) The user station as set forth in Claim 139, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a high-level user interface that enables the user at the user station to modify the object manifest.

142. (Currently Amended) The user station as set forth in Claim 137, ~~wherein the software further comprises~~ further comprising a plurality of user interface program code for enabling the processor ~~functions that enable the user~~ to submit functional requests to the selected online service.

143. (Currently Amended) The user station as set forth in Claim 133, wherein the ~~online service selector function~~ first program code enables the processor to presents the user with a list of the available online services.

144. (Currently Amended) The user station as set forth in Claim 133, wherein the user station is configured ~~for communications to~~ communicate with a multiplicity of independently-operated data sources via a non-proprietary network, and the software further comprises a data transport ~~function~~ program code that enables the processor to effectuates data transfers between the user station and a selected one of the independently-operated data sources via the non-proprietary network.

145. (Previously Presented) The user station as set forth in Claim 144, wherein the non-proprietary network comprises the Internet.

146. (Cancelled)

147. (Currently Amended) The user station as set forth in Claim 133, ~~wherein the software further comprises~~ further comprising a plurality of database functions program code stored at the user station, ~~wherein the~~ for enabling the processor to present a user is presented with a different customized database function for each different online service by a corresponding ~~one of said~~ database functions.

148. (Currently Amended) The user station as set forth in Claim 147, wherein portions of the ~~software used to present the customized database function~~ database function program code are downloaded from the corresponding online service in advance of their execution.

149. (Currently Amended) The user station as set forth in Claim 133, further comprising general purpose user interface computer program code wherein the presentation of each of said customized graphical user interface functions is facilitated by use of a common general purpose user interface software package stored and executable at the user station for enabling the processor to facilitate the presentation of each of said customized graphical user interfaces.

150. (Previously Presented) The user station as set forth in Claim 133, wherein each of the customized graphical user interfaces ~~functions~~ operates as a customized element of a common user interface software package stored and executable at the user station.

151. (Currently Amended) The user station as set forth in Claim 133, wherein the first computer program code is updateable from a remote source to enable the processor to expand the number of available online services ~~can be expanded through use of the software to update itself from a remote source.~~

152. (Previously Presented) The user station as set forth in Claim 133, wherein the user station is a personal computer.

153. (Currently Amended) A computer program product comprising a computer useable medium storing computer program logic, the computer program logic comprising: ~~Software stored on a computer readable storage medium at a user station, comprising:~~

first computer program code, ~~an online service selector function,~~ stored and executable at the a user station, that enables a user for enabling a processor at the user station to select among a plurality of available online services to support an application function;

second computer program code ~~a common communications function,~~ stored and executable at the user station, that directs for enabling the processor to direct the establishment and use of a communication link between the user station and each online service, when the online service is selected;

third computer program code ~~a plurality of graphical user interfaces functions~~ stored and executable at the user station, and associated with said application function, ~~and used for~~ enabling the processor to present the user with different customized graphical user interfaces ~~functions~~ for different selected online services in support of said application function; wherein,

the different customized graphical user interface functions include ~~elements of a graphical user interface, wherein~~ at least ~~one of the~~ elements is effected by the use of executable code that is custom to the respective online service; and

portions of the ~~software used to present the customized graphical user interface functions~~ third computer program code are downloaded from the selected online service in advance of their execution.

154. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, further comprising a set of translators and protocol drivers ~~that facilitate establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service.

155. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, further comprising a protocol translation program code function ~~that facilitates establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service.

156. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, further comprising ~~an~~ application programming interface program code that enables the processor to interconnects the online service selector function and the communications function.

157. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, further comprising a data transport program code function that enables the processor to effectuates data transfers between the user station and the selected online service via the established communication link.

158. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 157, wherein the data transport function uses an object manifest to effectuate data transfers.

159. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 158, further comprising ~~an~~ application programming interface program code for enabling the processor to modify through which the object manifest can be modified.

160. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 159, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a higher-level software entity that can be invoked to modify the object manifest.

161. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 159, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a high-level user interface that enables the user at the user station to modify the object manifest.

162. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 157, further comprising a plurality of user interface functions that enable the user to submit functional requests to the selected online service.

163. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, wherein the ~~online service selector function~~ first program code enables the processor to presents ~~the~~ a user with a list of the available online services.

164. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, wherein the user station is configured ~~for communications to communicate~~ with a multiplicity of independently-operated data sources via a non-proprietary network, and further comprises a data transport program code function that enables the processor to effectuates data transfers between the user station and a selected one of the independently-operated data sources via the non-proprietary network.

165. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 164, wherein the non-proprietary network comprises the Internet.

166. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, further comprising ~~a plurality of database functions~~ program code stored at the user station, ~~wherein the~~ for enabling the processor to present a user is presented with a different customized database function for each different online service by a corresponding ~~one of said database functions.~~

167. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 166, wherein portions of the ~~software used to present the customized database function~~ database function computer program code are downloaded from the corresponding online service in advance of their execution.

168. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, further comprising general purpose user interface computer program code ~~wherein the presentation of each of said customized graphical user interface functions is facilitated by use of a common general purpose user interface software package stored and executable at the user station~~ for enabling the processor to facilitate the presentation of each of said customized graphical user interfaces.

169. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, wherein each of the customized graphical user interfaces ~~functions~~ operates as a customized element of a common user interface software package stored and executable at the user station.

170. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 153, wherein the first computer program code is updateable from a remote source to enable the processor to expand the number of available online services ~~can be expanded through use of the software to update itself from a remote source.~~

171. (Currently Amended) A user station, comprising a processor and a computer useable medium storing computer program logic, the computer program logic comprising: ~~software stored on a computer readable storage medium, the software including:~~

~~first computer program code, an online service selector function,~~ stored and executable at ~~the a~~ user station, ~~that enables a user~~ for enabling a processor at the user station to select among a plurality of available online services to support an application function;

~~second computer program code a common communications function,~~ stored and executable at the user station, ~~that directs~~ for enabling the processor to direct the establishment and use of a communication link between the user station and each online service, when the online service is selected;

~~third computer program code a plurality of graphical user interfaces functions~~ stored and executable at the user station, and associated with said application function, ~~and used for~~ enabling the processor to present the user with different customized graphical user interfaces ~~functions~~ for different selected online services in support of said application function; wherein,

the different customized graphical user interface functions include ~~elements of a graphical user interface, wherein~~ at least one of the elements is effected by the use of executable code that is custom to the respective online service; and

portions of the ~~software used to present the customized graphical user interface functions~~ third computer program code are downloaded from the selected online service in advance of their execution.

172. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, further comprising a set of translators and protocol drivers ~~that facilitate establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service.

173. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, further comprising a protocol translation program code ~~function that facilitates establishment of~~ for enabling the processor to establish the communication link between the user station and the selected online service.

174. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, further comprising ~~an~~ application programming interface program code that

enables the processor to interconnects the online service selector function and the communications function.

175. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, further comprising a data transport ~~program code function~~ that enables the processor to effectuates data transfers between the user station and the selected online service via the established communication link.

176. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 175, wherein the data transport function uses an object manifest to effectuate data transfers.

177. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 176, further comprising an application programming interface program code for enabling the processor to modify ~~through which the object manifest can be modified.~~

178. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 177, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a higher-level software entity that can be invoked to modify the object manifest.

179. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 177, wherein the application programming interface program code enables the processor to interconnects the data transfer function and a high-level user interface that enables the user at the user station to modify the object manifest.

180. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 175, further comprising a plurality of user interface functions that enable the user to submit functional requests to the selected online service.

181. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, wherein the ~~online service selector function~~ the first computer program code enables the processor to presents ~~the~~ a user with a list of the available online services.

182. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, wherein the user station is configured for communications with a multiplicity of independently-operated data sources via a non-proprietary network, and further comprises a data transport ~~function~~ computer program code that enables the processor to effectuates data transfers between the user station and a selected one of the independently-operated data sources via the non-proprietary network.

183. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 182, wherein the non-proprietary network comprises the Internet.

184. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, further comprising a ~~plurality of~~ database functions computer program code stored at the user station, ~~wherein the~~ for enabling the processor to present a user is presented with a different customized database ~~function~~ for each different online service by a corresponding ~~one of said~~ database functions.

185. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 184, wherein portions of the ~~software used to present the customized database function~~ database function computer program code are downloaded from the corresponding online service in advance of their execution.

186. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, further comprising general purpose user interface computer program code ~~wherein the presentation of each of said customized graphical user interface functions is facilitated by use of a common general purpose user interface software package stored and executable at the user station~~ for enabling the processor to facilitate the presentation of each of said customized graphical user interfaces.

187. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, wherein each of the customized graphical user interfaces ~~functions~~ operates as a customized element of a common user interface software package stored and executable at the user station.

188. (Currently Amended) The ~~software~~ computer program product as set forth in Claim 171, wherein the first computer program code is updatable from a remote source to enable the processor to expand the number of available online services ~~can be expanded through use of the software to update itself from a remote source.~~